SCOPE OF WORK NEWTON SUBAREA COMPLEX A-014129 KANSAS DEPARTMENT OF TRANSPORTATION August 2020

KDOT is relocating their current subarea complex to a new location off US Highway 50 on the south side of Newton. The new complex will replace the current complex located at 1020E. 12th Street in Newton, Kansas. The complex will house a new subarea shop and office, equipment storage building, a salt/sand bunker and brine tank and a fuel island.

Construction costs estimated at \$2,300,000 with the total project costs at \$2,600,000.

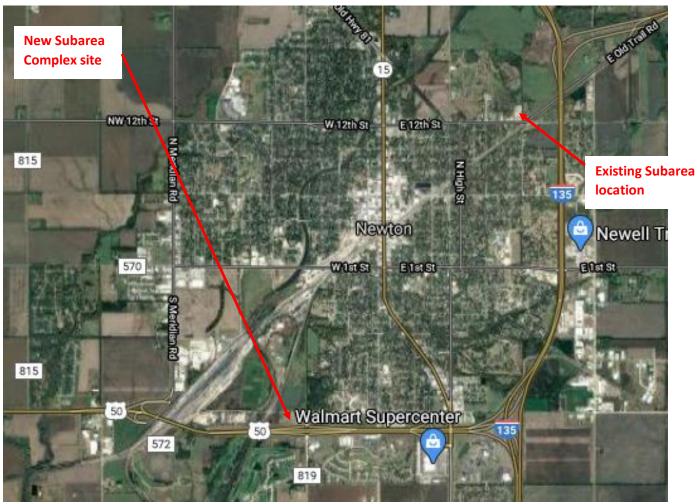


Figure 1; Vicinity map of Newton.

THE SITE

The site for the new subarea complex is located north of US highway 50, west of South Anderson Road, south of SW 14th Street and east of Sand Creek and the railroad tracks. Entrance to the new complex will be from SW 14th Street.

The work will include geotechnical, surveying and site development to accommodate KDOT's needs and operations. Some site fill may be needed as the site does pond water.

Utilities are available near the site.



Figure 2; Site Plan.

THE BUILDINGS

THE SUBAREA BUILDING will be a 5-bay subarea shop with bays to accommodate 5 KDOT trucks with spreader and plow attached, a wash bay, two offices, an office for KHP with an entrance to the outside, a crew room, a break room, storage space and restrooms. Construction is anticipate to be a pre-engineered metal building. The building will be 7,000 SF with about 5,000 for the truck storage and the remainder used for the offices, and support spaces along with an enclosed wash bay to accommodate all KDOT vehicles will be required.

Fire sprinkler and fire alarm requirements will be determined after a code analysis. A stand-by generator will be provided, size to be determined.

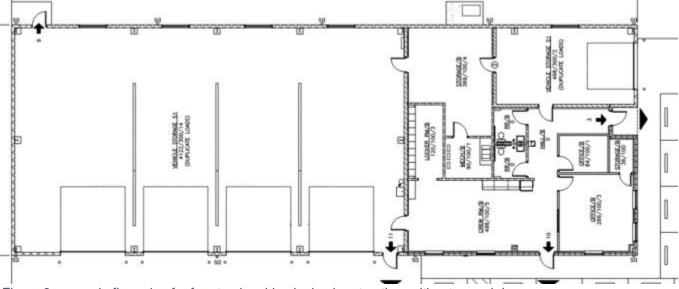


Figure 3; example floor plan for four trucks, drive-in, back-out option, without a wash bay.

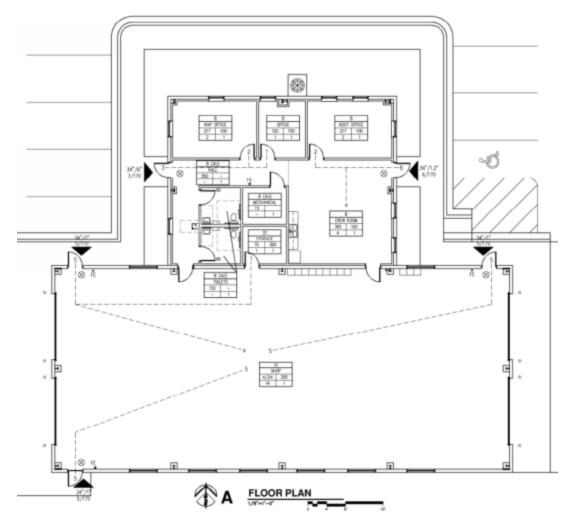


Figure 4; Alternate configuration for 4 trucks, pull through option without wash bay.

THE EQUIPMENT STORAGE BUILDING. Provide for a 10-bay, open front pre-engineered, wood framed equipment storage building. An asphalt or concrete floor will be required.



Figure 5; An image of an equipment storage building.

<u>SALT / SAND BUNKER</u> will be a 40' x 72'sand bunker with 10' tall cast-in-place concrete stem wall preengineered wood framed building above. A large open doorway on the front to accommodate loaders and a concrete floor.



Figure 6; Image of a salt/sand bunker with the vinyl curtain over the doorway.



Figure 7; Interior of the salt sand bunker.

Brine Tank. Adjacent to the salt/sand bunker will be a pad for an owner provided brine tank.



A fuel island with an above ground tank, is to be located on site. Project to include design for the pad, bollards and all necessary conduit and code required features. KDOT will contract separately for the fuel tank and related equipment.



Figure 8; Example of a small fuel tank, similar in size to the one required.

Site paving, site lighting and will also be part of the package. Portions of the yard will be gated and fenced.

SCHEDULE

Advertisement for Design Services Commencement of Design Work Released to bidders Construction begins Occupancy	mid-October 220 April 2021 July 2021
BUDGET	
Construction Budget	\$2,300,000
Soft Costs including AE Fee, IT, Owner Supplied Equipment	\$300,000
TOTAL PROJECT BUDGET	\$2,600,000

PROCESS

Design and construction to follow requirements of the OFPM Building Design and Construction Manual. A code analysis and accessibility analysis will be required to be submitted for compliance to applicable codes. This project will bid though OFPM and construction administration will be administered by the design team.

State of Kansas - List of Applicable Codes for construction projects on State property

Department of Administration; OFPM-DCC

The code editions must be listed on the code footprint and must be listed on the title page of each discipline's construction documents.

- A. International Building Code (IBC), 2018 Edition.
 - a. Chapter 11, Accessibility, is deleted. See Item N below.
 - Additionally, The Life Safety Code (NFPA 101) will also be applicable for occupancies described in Item J. and K. below.
- B. International Building Fire Code (IFC), 2018 Edition.
- C. International Residential Code (IRC), 2018 Edition.
- D. International Existing Building Code (IEBC), 2018 Edition
- E. International Mechanical Code (IMC), 2018 Edition.
- F. International Plumbing Code (IPC), 2018 Edition.
- G. International Fuel Gas Code (IFGC), 2018 Edition.
- H. International Energy Conservation Code (IECC), 2018 Edition or ASHRAE 90.1-2013.
- I. The codes and standards referenced in the Referenced Standards Chapters in the IBC, IFC, IRC, IMC, IPC, IFGC and IECC shall be applicable. Codes listed in item J below shall be identified on the code footprint, if applicable to the project. The NFPA editions noted in Item K below shall be applicable for the occupancies listed and shall be identified on the code footprint if applicable to the project.
- J. National Fire Protection Association (NFPA), National Fire Codes and Standards for non-Healthcare occupancies described in Item K.
 - a. NFPA 10 2018 Edition Portable Fire Extinguishers
 - b. NFPA 13, 13D and 13R 2016 Edition Installation of Sprinkler Systems
 - c. NFPA 14 2016 Edition Installation of Standpipe and Hose Systems
 - d. NFPA 20 2016 Edition Installation of Stationary Pumps for Fire Protection
 - e. NFPA 25 2017 Edition Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
 - f. NFPA 45 2015 Edition Fire protection for Laboratories Using Chemicals
 - g. NFPA 70 2017 Edition National Electric Code (NEC)
 - h. NFPA 72 2016 Edition National Fire Alarm Code
 - i. NFPA 96 2017 Edition Ventilation Control and Fire Protection for Commercial Cooking Operations
 - NFPA 101 2018 Edition Life Safety Code–only applicable to adult & boarding care homes per OSFM K.A.R.– 22-11-8.
 - k. NFPA 110 2016 Edition Emergency and Standby Power Systems
 - NFPA 241 2013 Edition Safeguarding Construction, Alteration and Demolition Operations
- K. ASME A17.1/CSA B44-2016 Safety Code for Elevators and Escalators
- L. Kansas Fire Prevention Code (This code combines many different documents including Kansas Statutes Annotated (K.S.A.) and Kansas Administrative Regulations (K.A.R.).) A list of pertinent statutes and regulations can be found at the Office of the State Fire Marshal (OSFM) website at www.firemarshal.ks.gov.
- M. K.S.A. 58-1301 et seq 2010 ADA Standards for Accessible Design (2010 ADA Standards).
- N. Kansas State Boiler Code (K.S.A. 44-913 et seq) available through the Office of the State Fire Marshal (OSFM) at www.firemarshal.ks.gov.